

REMARKS

In response to the Office Action mailed July 15, 2003, the Applicants respectfully request reconsideration. Claims 1-5, 8-10, 14-21, 23, 25-27, 29-55, 57-59, 61-93, 95-107 were previously pending in this application, with claims 1, 10, 14, 47, 79, 81 and 84 being independent claims. No claims have been added or cancelled. In this response, claims 1 and 14 have been amended. As a result, claims 1-5, 8-10, 14-21, 23, 25-27, 29-55, 57-59, 61-93, 95-107 are pending for examination. The application as now presented is believed to be in allowable condition.

Allowable Subject Matter

The Applicants note with appreciation that claims 18, 29-36, 42-45, 61-68, 75-78, 95-99 and 104-107 have been indicated as reciting allowable subject matter. The Applicants have deferred rewriting any allowable dependent claims in independent form pending further action following this response.

Rejections Under 35 U.S.C. §102

The Office Action rejected claims 1-5, 8-10, 14-17, 19-21, 23, 25-27, 37-41 and 46 under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent No. 5,305,013 to Daniels (hereinafter Daniels). The Applicants respectfully traverse these rejections.

Regarding claims 1-5, 8-9, 21, 23, 25-27 and 37-41

As a preliminary matter, the Applicants note that they have made a minor amendment to claim 1 to clarify one of the recitations and improve the readability of the claims. As will be readily appreciated from the discussion below, this amendment to claim 1 was not made to overcome any art of record, including Daniels.

The Office Action alleges that Daniels discloses in FIG. 3 a color-changing device 20 including an enclosure 30 that would be inherently formed at least in part by an at least partially transparent material. Further, the Office Action alleges that Daniels discloses an illumination device formed of at least one LED-based light source (41-48) disposed within the enclosure 30 and configured to illuminate said enclosure and to generate at least two colors. The Office Action states that LEDs are capable of outputting at least first radiation having a first wavelength

and second radiation having a second wavelength since the LEDs can have different electromagnetic radiation with different wavelengths depending primarily on the materials from which they are made. The Office Action further states that Daniels discloses a controller 86 to control the at least one LED-based light source. The Applicants respectfully disagree.

With regard to the inherency of the enclosure, the Office Action states that the enclosure would be formed at least in part by an at least partially transparent material “since it can a (sic) screen made of clear glass to provide a graphical display.” The Applicants understand that sentence to read that the at least partially transparent material “can be a screen made of clear glass,” and proceed on this understanding.

Daniels discloses a graphical display icon located on the front of a data storage unit. The icon provides status information on disk drives within the unit (Abstract). The shape of the icon is identical to that of the unit, and the icon includes bicolor LEDs at locations that correspond to locations of the disk drives inside the unit (Abstract). The color emitted by the LEDs communicates information on the status of a corresponding disk drive within the unit (Abstract). Daniels does not disclose the specifics of the icon, nor does Daniels disclose that the LEDs are located within an enclosure. Accordingly, Daniels neither discloses nor suggests that LEDs can be disposed within an enclosure.

Further, application of the concept of “inherency,” as set forth in the Office Action to allege that an enclosure is inherent in the teachings of Daniels is improper. “To establish inherency, the extrinsic evidence must make clear that the missing ... matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill” (MPEP §2112, citing *In re Roberson*, 169 F.3d 743 (Fed. Cir. 1999)). In the present instance not even the first prong of the test for inherency is met. That is, the presence of an enclosure of any sort is not *necessary*. To the contrary, the LEDs disclosed in Daniels will function in their intended manner without such an enclosure. At least because Daniels neither explicitly, implicitly, nor inherently teaches or suggests disposing LEDs in an enclosure, claim 1 patentably distinguishes over Daniels and is in condition for allowance. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 2-5, 8-9, 21, 23, 25-27 and 37-41 depend from claim 1 and are patentable for at least the same reason as claim 1.

Regarding claims 10 and 46

The Office Action applies Daniels to claim 10 in the same manner as stated above with reference to claim 1.

Claim 10 recites a method comprising, *inter alia*, an act of providing an illumination device disposed in an enclosure, and an act of illuminating at least a portion of the enclosure. As discussed above, Daniels neither explicitly, implicitly, nor inherently teaches or suggests the acts recited in claim 10.

Accordingly, at least for this reason, claim 10 patentably distinguishes over Daniels. Therefore, withdrawal of this rejection is respectfully requested.

Claims 46 depends from claim 10 and is patentable for at least the same reason as claim 10.

Regarding Claims 14-17, 19-20

As a preliminary matter, the Applicants note that they have made a minor amendment to claim 14 to clarify one of the recitations and improve the readability of the claims. As will be readily appreciated from the discussion below, this amendment to claim 14 was not made to overcome any art of record, including Daniels.

In the pertinent parts, the Office Action rejected claim 14 referring to Fig. 4 of Daniels. Specifically the Office Action alleges that Fig. 4 illustrates a method for changing the color of a device 20 comprising the steps of: generating an input signal from the disk drive interface 82; generating a control signal from the controller 86 through a driver to the LEDs; controlling with controller 86 a lighting system (41-48) via the control signal; said lighting system including at least one LED-based light source 41 capable of outputting at least first radiation having a first wavelength and second radiation having second wavelength, since the LEDs can have different electromagnetic radiations with different wavelengths depending primarily on the materials from which they are made; and arranging the lighting system (41-48), as shown, to illuminate enclosure 30. The Applicants respectfully disagree.

Again, claim 14 recites an act of arranging a lighting system to illuminate at least a portion of a device enclosure. As stated above, Daniels neither explicitly, implicitly, or inherently

teaches nor suggests this act. Accordingly, at least for this reason, claim 14 patentably distinguishes over Daniels. Therefore, withdrawal of this rejection is respectfully requested.

Claims 15-17, 19-20 depend from claim 14 and are patentable for at least the same reason as claim 14.

Rejections Under 35 U.S.C. §103

The Office Action rejected claims 47-55, 57-59, 69-74, 79-93 and 100-103 under 35 U.S.C. §103(a) as allegedly being obvious over Daniels in view of European Published Patent Application No. 0 564 127 to Blonder (hereinafter Blonder). The Applicants respectfully traverse these rejections.

The Office Action states that Daniels is to be applied in the manner described above with reference to claim 1, and that Daniels discloses the claimed invention except for an illumination device configured to illuminate at least a portion of the surface of an enclosure with a variable color light such that during operation of the at least one illumination device, at least the portion of the enclosure appears to have a variable color to an observer viewing the enclosure from the outside the enclosure.

Next, referring to col. 1, line 31 and col. 3 lines 30-52 of Blonder, the Office Action states that Blonder discloses a color-changing apparatus 2 having an illumination device L1 configured to illuminate at least a position of the surface of enclosure 4 with a variable color light such that during operation of the at least one illumination device, i.e. when voltage is applied, at least the portion of the enclosure 4 appears to have a variable color (different color pigment red, blue and yellow) to an observer viewing the enclosure from outside the enclosure. The Office Action then alleges that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the color-changing enclosure as taught by Blonder into a Daniels-type apparatus, because “it would allow signaling that is observable by the hearing impaired, and enhance aesthetic quality, thereby improving the efficacy of the system.” The Applicants respectfully disagree.

Blonder discloses an apparatus housing that can have various exterior colors. The apparatus disclosed by Blonder includes a layer of electrically switchable, light modulating material 12 which is sandwiched between two electrically conductive layers 8, 10. The conductive layers are connected to a voltage supply 18. Light modulating material 12 is

embedded with a pigment 28. When the material 12 is in an OFF state, it is opaque and the housing takes on the color of the embedded pigment (col. 3, lines 30-35). Conversely, when the switchable material is in an ON state, it becomes transparent and the housing takes the color of the underlying background (col. 3, lines 35-37).

Blonder discloses two ways in which the background color (i.e., the color in the ON state) can be selected (col. 4, lines 11-14). The background color can simply be the color of the inside of the apparatus which the housing encloses. In such an apparatus, when the switchable material is ON (i.e., transparent), the inside of the apparatus is visible through the switchable material. Alternatively, a colored substrate layer 30 can be disposed under conductive layer 10. In such an apparatus, when the switchable material is ON (i.e., transparent), the colored substrate layer 30 is visible through the switchable layer.

Accordingly, the colored illumination provided by the apparatus in Blonder is generated in a passive manner. That is, when in an OFF state, the color of the apparatus disclosed in Blonder is generated by reflection of ambient light from pigment 28; and when in an ON state, the color of the apparatus in Blonder is generated by reflection of ambient light from the color of the interior of the apparatus or from the substrate layer 30. From the foregoing, it should be readily appreciated that there is no active illumination device in Blonder.

Claims 47-55, 57-59, 69-74, 79-93 and 100-103 are patentable over Daniels and Blonder at least because the combination of Daniels and Blonder is improper. In fact, there is no teaching or suggestion in Daniels or Blonder that would motivate one of ordinary skill in the art to combine the icon 20 including LEDs, as disclosed in Daniels, with the passive color generating apparatus of Blonder.

The motivation for combining Daniels and Blonder provided by the Office Action is improper. In a first instance, the Office Action states that combining the devices would allow signaling observable to the hearing impaired. However, there is no need to modify Daniels to allow signaling observable to the hearing impaired, because Daniels discloses a device that already uses visual signaling (i.e., bi-color LEDs). In a second instance, the Office Action states that combining the devices of Daniels and Blonder would enhance aesthetic quality. Because it is not clear how the device of Daniels would be combined with Blonder, it is not apparent how such a modification of Daniels would improve the aesthetic qualities of Daniels.

In fact, the apparatus disclosed in Daniels and Blonder are so disparate that it is not clear how one could combine them. Blonder discloses an apparatus in which a switchable layer is operated in an ON and an OFF state to expose or cover a background material. Daniels discloses an apparatus in which LEDs are illuminated or not illuminated to indicate the status of disk drives. These two references respectively are directed to different problems and solve their respective problems with different and unrelated solutions. Hence, the combination of these references is improper.

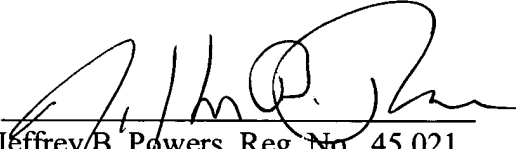
For the above reasons, withdrawal of the rejections of claims 47-55, 57-59, 69-74, 79-93 and 100-103 is respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 50/2762.

Respectfully submitted,
Dowling, et al., Applicants

By: 
Jeffrey B. Powers, Reg. No. 45,021
Joseph Teja, Jr., Reg. No. 45,157
LOWRIE, LANDO & ANASTASI, LLP
One Main Street
Cambridge, Massachusetts 02142
United States of America
Telephone: 617-395-7000
Facsimile: 617-395-7070

Docket No.: C01104/70074
Date: December 15, 2003